



By the Numbers

205 NPP Fellows served for all or part of this month:

- 7 new Fellows started their appointments
- 4 Fellows renewed their appointments
- 2 Fellows completed their appointments

0 applicants were offered an appointment this month.

November 2011 Application Cycle

173 complete applications were submitted by the deadline.

The breakdown, by Center:

ARC = 22	GRC = 6	JPL = 40
LaRC = 3	NASA HQ = 1	Astrobiology = 19
GSFC = 78	JSC = 3	MSFC = 1

Of those 173 applications:

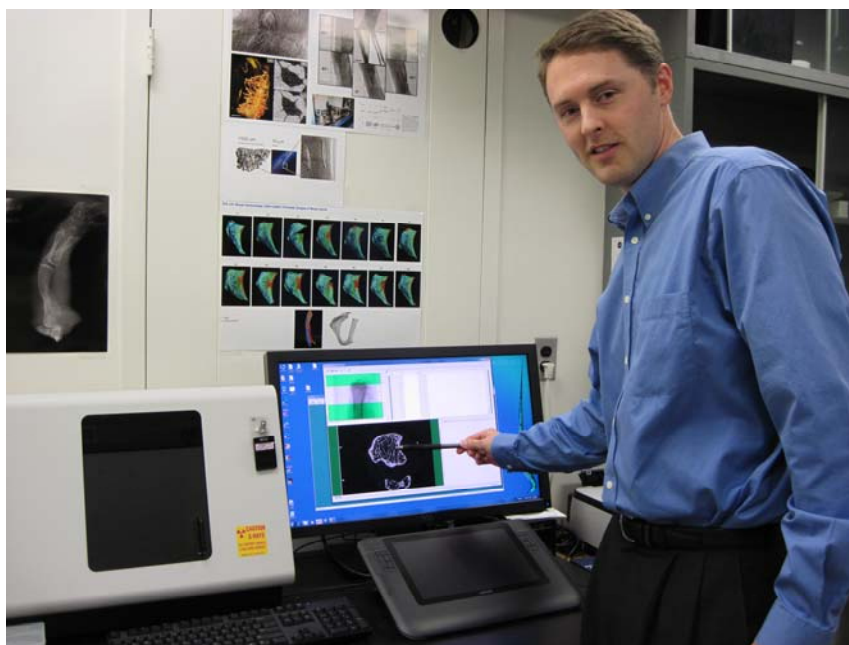
- 160 have been recommended for peer review
- 6 have been declined for peer review
- 13 have not been evaluated by the advisor

Of the 160 that have been recommended for peer review:

- 137 have passed peer review
- 5 have failed peer review
- 18 still require one or more scores

We expect all peer reviews to be complete by Friday, 13 January.

Meet the Fellows: Josh Alwood, ARC



Growing up in Florida, Dr. Josh Alwood was exposed to frequent rocket launches and year-round athletics. "Seeing launches firsthand inspired my interest in science and human spaceflight," he says. "And participating in athletics initiated my interest in the skeleton, which is a living and evolving structure."

Today, as an NPP Fellow at [Ames Research Center](#), Alwood investigates the effects of spaceflight on the skeleton.

"It fascinates me that mechanical forces influence the way bones are built and maintained," Alwood says. "The marriage of these ideas came about by learning about the biological challenges imposed by weightlessness, especially to the skeleton."

The simulations Alwood utilizes aim to model the weightlessness and radiation exposure associated with spaceflight. He's working to understand and alleviate potentially debilitating changes in skeletal architecture that occur during long-duration spaceflight. Alwood's research suggests that an antioxidant countermeasure could be effective in mitigating bone loss associated with radiation exposure.

"My research, and the work of others, has shown that radiation exposure stimulates bone-resorbing cells and can suppress bone-forming cells, which leads to net bone loss," Alwood says. "I have discovered that this bone loss leads to altered mechanical force distribution within bones."

Dr. Alwood's NPP appointment will continue until October 2012, under the guidance of his ARC advisor, Dr. Ruth Globus.



NPP Website Metrics

- 4,448 unique visitors
- 173 average visitors per day

Last Month	This Month
China (335 visitors)	China (267 visitors)
United Kingdom	India
India	United Kingdom
France	France
Germany	Germany
Japan	Canada
Canada	Greece
Italy	Italy
South Africa	Russia
Australia	Japan
Spain	Spain
Russia	Korea
Portugal (51)	Singapore (71)

Travel and Relocation Support

- **75** Began trips in December (5 Foreign and 70 Domestic)
 - Domestic Highlights:** AGU Fall Meeting in San Francisco (58 NPP Fellows attended)
 - International Highlights:** International Workshop on Astronomical X-ray Optics in Prague;
International Conference on Gravitation, Astrophysics and Cosmology in Qui-Nhon, Vietnam
- Finalized inbound relocation for **1** Fellow who relocated from overseas to the U.S. and **1** who relocated from somewhere in the US

Changes to Research Opportunities

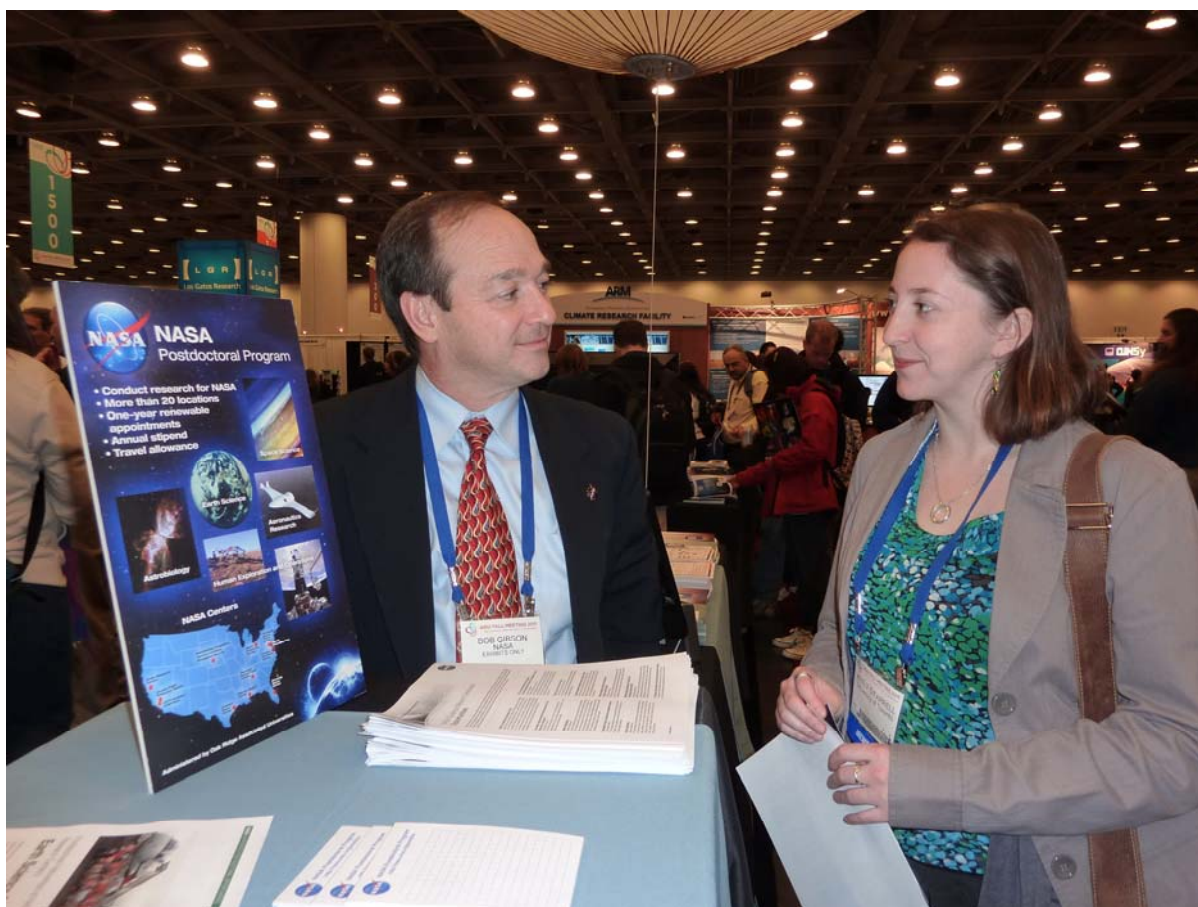
- Revised, added, or deleted **4** research opportunities this month:
 - 1** for GSFC, **1** for ARC, **1** for JSC, and **1** for LaRC

Recruiting News

The NPP staff advertised the program at the AGU Fall Meeting in San Francisco; many prospective applicants visited the NASA booth to get information on the program.

From 8-12 January, the NPP staff will advertise the program at the American Astronomical Society meeting in Austin, TX.

If you are attending the AAS winter meeting, please stop by to see us!



AGU 2011: An earth scientist talks to Bob about the NPP.